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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,608	12/28/2005	Thomas Tiller	5776	9165
26/936 7590 04/16/2009 SHOEMAKER AND MATTARE, LTD 10 POST OFFICE ROAD - SUITE 100 SILVER SPRING, MD 20910				
EXAMINER				
ALEXANDER, LYLE				
ART UNIT		PAPER NUMBER		
1797				
MAIL DATE		DELIVERY MODE		
04/16/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/560,608

**Applicant(s)**

TILLER ET AL.

**Examiner**

Lyle A. Alexander

**Art Unit**

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/55/08)  
Paper No(s)/Mail Date \_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 18-45 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification states the material are "marked" using marking compositions or ions. It is clear how a marking composition could "mark" a product for subsequent identification. However, it is not clear how "ions" could be used to mark a product. The term "ion" is best understood as an atom or molecule that has lost an electron. It is not clear how an atom missing an electron is unique and could be used as a "marker." Also, ions are not stable and may take electrons from the materials the "ions" are marking which would render the ions non-existent and unable to be a "marker."

The specification also requires the marking composition to be inert to the compounds marked and living organisms that may consumed the marked materials. The suggested marking composition is sea water (page 6 lines 10+ of the original specification). The Office does not believe sea water is inert to the materials being marked or to living organism. The salts in sea water would be a contaminant to

pharmaceuticals, beverages and cosmetics. The salts could react with the pharmaceuticals and cosmetic. The salts could add an adverse taste to the beverages. It is not clear how sea water could be an inert "marker."

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 18-45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are directed to marking a compound by the identification of "ions" which is confusing. The claimed term "ion" is best understood as an atom or molecule that has lost an electron. The claimed "ion" is not a specific material that can provide unique identification. Further, the claims require the marker concentration at less than 50 ppm but greater than a factor of 3 in the unmarked material. It is not clear what happens if the concentration of the marker in the material does not fall within these criteria. For example, what happens if the unmarked material has a concentration of the marker in excess of 16.67 ppm, then the marker would have to be applied in a concentration in excess of 50 ppm. Clarification could be achieved by stating the selected marker has to meet the criteria of being less than 16.67 ppm in the unmarked material. Similarly, claims 21-22 require the marker to have a concentration of less than a factor of 5 and 8 which corresponds to less than 10 and 6.67 ppm respectively to satisfy these claimed conditions.

Claim 18 step "a)" is not clear what concentration is intended by "at least one ion." Step "c)" is not clear how the marking material is incorporated into the material to be marked.

Claim 24 is not clear what is intended by "standard sea water." Clarification could be achieved by deleting "standard."

Claims 42-43 are not clear what is intended by "field audit analysis." For the purposes this phrase will be interpreted as "authentication."

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 18-46 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Anderson et al. (USP 5,849,590).

In light of the above 35 USC 112 issues, the invention is best understood as a method of tagging a composition with cations selected from the group consisting of ammonium, lithium, sodium, potassium, rubidium, cesium, magnesium, calcium, strontium, barium, iron, cobalt, nickel, copper and zinc.

Anderson et al. teach a method of tagging a material using cations of the rare elements that include the claimed cations nickel, cobalt, lithium, copper, cesium, etc. Column 3 lines 4-7 teach the concentration of the tag is from 1-100,000 ppm and column 6 lines 20-21 teach the tag in concentration range of 1-100 ppm which

encompasses the claimed range of "below 50 ppm." Column 3 lines 23+ teach the tagging agents are added to the material in the form of a solution. Column 1 lines 58-66 teach sea water is a good composition to be used as a taggant. Column 5 lines 51-60 teach the tag can be identified using MS, NMR or GC which have been read on the claimed methods of analysis. Columns 7lines 59-61 teach " ... the rare earth elements in the tagging agents are either not normally detectable at all in the composition being tagged or are detectable at extremely low levels" which has been read on the claimed "... by at least a factor of ..." (e.g. if the naturally occurring concentration of the tag in the material is undetectable, then the tag in the taught concentration range of 1-100 ppm would meet the instant claims).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lyle A. Alexander whose telephone number is 571-272-1254. The examiner can normally be reached on Monday, Tuesday and Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lyle A Alexander  
Primary Examiner  
Art Unit 1797

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